Your grade: 100%

Your latest: **100%** • Your highest: **100%** • To pass you need at least 60%. We keep your highest score.

Next item →

Instructions

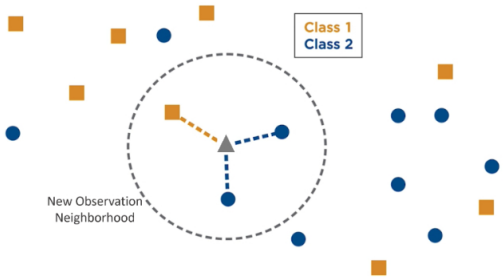
The following questions ask you to consider the distinguishing characteristics of KNN and SVM classification models and when they might appropriately be used.

1. Which model type would be more appropriate for a very large data set? 1 / 1 point

- ○ KNN
- ◉ SVM

Correct
SVM models only need to determine where new predictions lie relative to a decision boundary established during training. This makes them more efficient with large data sets.

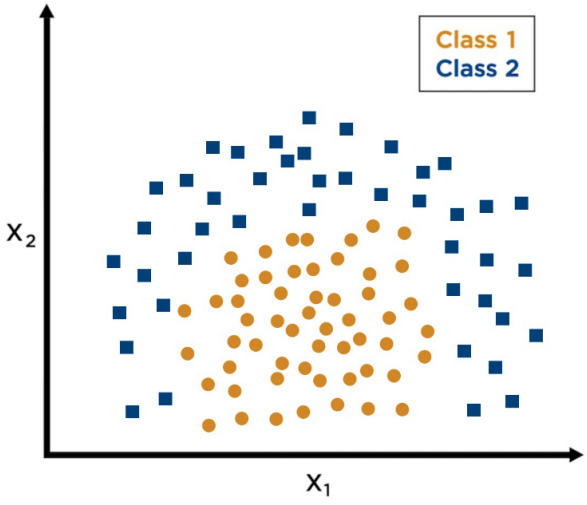
2. Which model type is depicted below? 1 / 1 point



- ◉ KNN
- ○ SVM

Correct
KNN predicts a response by looking at the closest K observations. In this case, K = 3.

3. You would like to train a classification model on data that has two predictor features. Plotting the data in a scatter plot looks like this: 1 / 1 point



Which model should you train to best capture the boundary between the two classes?

For this question, you can choose **multiple** correct answers.

- ☑ A KNN Model

Correct
KNN classifiers generally perform well when classifying data with complex nonlinear boundaries between classes.

- ☐ An SVM model with a **linear** kernel
- ☑ An SVM model with a **nonlinear** kernel

Correct
SVM classifiers can yield nonlinear decision boundaries (like what is required by this dataset) only if they use a non-linear kernel.